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DOCKET NO.: CSAC-0009

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Ramesh, et al

Confirmation No.: 9820

Application No.: 09/782,337

Group Art Unit: 1771

Filing Date: February 13, 2001

Examiner: Victor S. Chang

For: Polyolefin Film/Foam/Film Composite Materials And Methods For Producing Same

EXPRESS MAIL LABEL NO: EV 631246552 US
DATE OF DEPOSIT: October 11, 2005

(EV631246552US)

MS Appeal Brief - Patent
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**APPEAL BRIEF TRANSMITTAL
PURSUANT TO 37 CFR § 1.192**

Transmitted herewith in triplicate is the APPEAL BRIEF in this application with respect to the Notice of Appeal received by The United States Patent and Trademark Office on **August 10, 2005**.

- Applicant(s) has previously claimed small entity status under 37 CFR § 1.27.
- Applicant(s) by its/their undersigned attorney, claims small entity status under 37 CFR § 1.27 as:
 - an Independent Inventor
 - a Small Business Concern
 - a Nonprofit Organization.
- Petition is hereby made under 37 CFR § 1.136(a) (fees: 37 CFR § 1.17(a)(1)-(4)) to extend the time for response to the Office Action of _____ to and through _____ comprising an extension of the shortened statutory period of _____ month(s).

	SMALL ENTITY		NOT SMALL ENTITY	
	RATE	Fee	RATE	Fee
<input checked="" type="checkbox"/> APPEAL BRIEF FEE	\$250	\$	\$500	\$500.00
<input type="checkbox"/> ONE MONTH EXTENSION OF TIME	\$60	\$	\$120	\$0.00
<input type="checkbox"/> TWO MONTH EXTENSION OF TIME	\$225	\$	\$450	\$0.00
<input type="checkbox"/> THREE MONTH EXTENSION OF TIME	\$510	\$	\$1020	\$0.00
<input type="checkbox"/> FOUR MONTH EXTENSION OF TIME	\$795	\$	\$1590	\$0.00
<input type="checkbox"/> FIVE MONTH EXTENSION OF TIME	\$1080	\$	\$2160	\$0.00
<input type="checkbox"/> LESS ANY EXTENSION FEE ALREADY PAID	minus	(\$)	minus	(\$0.00)
TOTAL FEE DUE		\$0		\$500.00

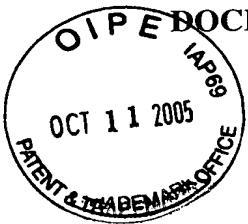
- The Commissioner is hereby requested to grant an extension of time for the appropriate length of time, should one be necessary, in connection with this filing or any future filing submitted to the U.S. Patent and Trademark Office in the above-identified application during the pendency of this application. The Commissioner is further authorized to charge any fees related to any such extension of time to Deposit Account 23-3050. This sheet is provided in duplicate.
- A check in the amount of \$500.00 is attached. Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050.
- Please charge Deposit Account No. 23-3050 in the amount of \$ ____ .00. This sheet is attached in duplicate.
- The Commissioner is hereby authorized to charge any deficiency or credit any overpayment of the fees associated with this communication to Deposit Account No. 23-3050.

Date: October 11, 2005

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Sir:

APPELLANT'S BRIEF PURSUANT TO 37 C.F.R. § 41.37

This brief is filed in support of Appellant's appeal from the rejections of claims 1-7, 9, 10, 13-16, 18, 19, 22, 23, and 29-31 dated May 6, 2005. A Notice of Appeal was filed on August 8, 2005.

1. REAL PARTY IN INTEREST

Sealed Air Corporation (U.S.) of Saddlebrook, New Jersey, by virtue of the assignment from the inventors recorded August 15, 2001.

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellants, Appellants' legal representative, or the assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending Appeal.

3. STATUS OF CLAIMS

Claims 1-7, 9, 10, 13-16, 18, 19, 22, 23, and 29-31 are pending and are rejected under 35 U.S.C. § 103(a) as allegedly obvious from U.S. Patent No. 4,469,741 (“the Akao patent”) in view of U.S. Patent No. 5,968,630 (“the Foster patent”). Claim 24 was withdrawn subject to a restriction requirement. The rejection of claims 1-7, 9, 10, 13-16, 18, 19, 22, 23, and 29-31 is appealed.

4. STATUS OF AMENDMENTS

All amendments are believed to have been entered. A complete listing of currently pending claims is provided in the Claims Appendix.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The invention, as claimed in independent claim 1, concerns a composite flooring material consisting essentially of a polyolefin foam sheet, a first polyolefin film heat-laminated to a first surface of the foam sheet and a second polyolefin film heat-laminated to a second surface of the foam sheet (page 3, lines 12-14). In this material, at least one edge of the second film extends beyond a corresponding edge of the foam sheet (page 3, lines 14-15). In some embodiments, the foam sheet is polyethylene which can be a low, medium or high density polyethylene (page 3, lines 15-17; and claim 3). In certain embodiments, the foam sheet has a thickness of from about 0.001 and about 2 inches (claim 5) or has a density of from about 1 to about 8 pounds/ft³ (page 3, lines 17-18, page 6, lines 6-9; original claim 4). In some materials, the first films can be made of low density polyethylene, metallocene-based polyethylene, medium density polyethylene, high density polyethylene, and biaxially oriented polypropylene (page 3, lines 19-21; claim 10). Some of these films are stretch oriented in at least two directions (page 4, line 16; claim 14). The second film can be made of polyethylene, low density polyethylene in some embodiments, and have a thickness of about 0.001 to about 0.008 inch (page 3, line 33 to page 4, line 6; claims 15, 18, 19). An adhesive can be applied to the edge of the edge of the second film that extends beyond the edge of the foam sheet (page 4, lines 19-21; claim 22). The adhesive may have a release layer positioned over the adhesive (page 4, line 21; claim 23).

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

An obviousness rejection under 35 U.S.C. § 103(a) is proper only when, *inter alia*, there is motivation to combine the references and the combination, properly made, provides an embodiment within the claims at issue. There is no motivation to combine the references advanced here – U.S. Patent No. 4,469,741 (“the Akao patent”) and U.S. Patent No. 5,968,630 (“the Foster patent”) – in the manner advanced by the examiner, but even if there were, the combination still would not provide the claimed invention. The Examiner has failed to demonstrate that Claims 1-7, 9, 10, 13-16, 18, 19, or claims 22-23 are rendered obvious by the cited references.

7. GROUPING OF THE CLAIMS

Claims 1-7, 9, 10, 13-16, 18, 19 and 29-31 stand or fall together. Claims 22 and 23 each stand or fall separately based on a separate argument.

8. ARGUMENT

Claims 1-7, 9, 10, 13-16, 18, 19, 22, 23 and 29-31 have been rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over the Akao patent in view of the Foster patent. The Examiner has failed to set forth a *prima facie* case of obviousness because the combination of the cited art does not produce any embodiment of the claimed invention and there is not proper motivation to combine the cited art. As set forth in M.P.E.P. §§2142-2143.03, in order to establish a *prima facie* case of obviousness, patent examiners are required to establish three criteria: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference, or combination of references, must teach or suggest all the claim limitations. The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. To make a proper obviousness determination, the examiner must “step backward in time and into the shoes worn by the hypothetical ‘person of ordinary skill in the art’ when the invention was unknown and just before it was made.” In view of the available factual information, the examiner must make a determination as to whether the claimed invention “as a whole” would

have been obvious at that time to a person of ordinary skill in the art. Importantly, a rejection based on these criteria must be based on what is taught in the prior art, not the applicant's disclosure. The applicant's disclosure may not be used as a blueprint from which to construct an obviousness rejection.

a. There Is Not Proper Motivation To Combine The Cited Art

One skilled in the art would not be motivated to combine the Akao and Foster patents in the manner alleged by the Examiner. The pending application is directed to composite materials that are useful as underlays for laminate floors. These composites are required to be good water vapor barriers so that laminate flooring is protected from damage due to exposure to water vapor. (See, e.g., specification at page 1, lines 25-35 and page 10, line 32 through page 11, line 10.) By having at least one edge of the second film extending beyond a corresponding edge of the foam sheet, the present invention achieves the desired level of water resistance, making it suitable for use as a flooring underlayment. (Specification at page 10, line 32 through page 11, line 10.)

In contrast, the Akao patent describes a laminate composition for use as a wrapping material or construction material, having strength and/or cushioning characteristics. The Akao patent does not suggest that providing a water vapor barrier is a desired characteristic of the composition described therein, and also does not suggest modifying the laminate by providing an extended film edge. When considering the Akao patent, therefore, one skilled in the art would have no reason to look to the Foster reference to provide the vapor barrier properties offered by an extended film edge. As a result, the assertion that the Akao and Foster patents should be combined is impermissible use of hindsight. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1457-8 (Fed. Cir. 1998) (“To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness.”).

The Examiner has dismissed these arguments, alleging that the Akao patent teaches use of its product as a flooring material and that, because the Akao patent and the Foster patent are in the same field of endeavor, it would be obvious to combine the cited art (May 6, 2005 Office Action at pages 4-5). The Examiner further argues that one skilled in the art would be motivated to combine the cited patents because use of the film layer extending over the edge of the foam would result in a more efficient installation and cost savings (*Id.*). No evidence is presented, however, that any saving in cost of installation would offset the

increased cost of manufacture associated with use of the extended edge strip. Without such, one would not be motivated to combine the Akao and Foster patents. In regard to claims 22 and 23, one must also consider the manufacturing and material costs of applying adhesive and a release liner. Even if the art is in the same field of endeavor, more is required. Some suggestion must be found within the art to suggest the combination of the cited art. There is simply no such suggestion in the Akao and Foster patents.

In view of the foregoing, Applicants submit that the rejection under 35 U.S.C. §103(a) is improper.

b. The Combination of the Cited Art Does Not Produce Any Embodiment of the Claimed Invention

The Examiner also has not established a *prima facie* case of obviousness because the combination of the cited art does not produce any claimed invention. In the present case, the Examiner alleges that the Akao patent contains all of the elements of the instant claims except the requirement that “at least one edge of the second film extends beyond a corresponding edge of the foam sheet.” The Examiner proposes to cure this defect in the teachings of the Akao patent by using the disclosure of the Foster patent. (May 6, 2005 Office Action at pages 2-3). Even if one were motivated to combine the teachings of the Akao and Foster patents as alleged by the Examiner, however, one would not arrive at any embodiment of the claimed invention. Instant claim 1 recites a composite flooring material that consists essentially of a polyolefin foam sheet, a first polyolefin film heat-laminated to a first surface of the foam sheet, and a second polyolefin film heat-laminated to a second surface of the foam sheet, wherein at least one edge of the second film extends beyond a corresponding edge of the foam sheet. Because claim 1 uses “consisting essentially of” as the transition phrase, the claim does not permit an additional independent layer to be utilized in the instant invention. The Akao patent, however, uses a separate adhesive layer to attach the film to the porous sheet (see, for example, the Summary of the Invention at column 2, lines 10-14) and thus would not produce a film that is heat-laminated to the porous layer. Because the additional adhesive layers of the prior art are not present or permitted in the material of the instant claims, the combination of cited art does not produce any claimed invention.

Furthermore, the Akao patent not only requires additional layers that are outside the scope of the instant claim, but also teaches away from the instantly claimed inventions. According to the Akao patent “heat-sealing the films....is also not desirable in that heat shrinkage of the film is caused at areas where heating is applied, resulting in the formation of

wrinkles which is not desirable from a viewpoint of quality.” (col. 2, line 66 to col. 3, line 2), emphasis added). Thus, the Akao patent teaches that one must use adhesive layers, and specifically not heat-lamination as claimed, or an inferior product will result.

A *prima facie* case of obviousness requires that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” (MPEP §2143.) Because the Akao patent, even as it might be modified by the Foster patent, does not result in the composition of amended claim 1, the present invention is not rendered obvious under §103.

9. CONCLUSION

Based on the detailed arguments and analysis presented above, Applicants respectfully submit that compositions of the instant claims are not obvious in view of the cited art and seek relief from the Examiner’s incorrect conclusions on this matter. More specifically, Applicants submit that the claims fully comply with the requirements of 35 U.S.C. § 103(a). Therefore, Applicants request that this patent application be remanded to the Examiner with an instruction to both withdraw the rejection for alleged unpatentability and allow the appealed claims.

Respectfully submitted,

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9. CLAIMS APPENDIX

Claim 1 (Previously presented): A composite flooring material consisting essentially of:

- a. a polyolefin foam sheet;
- b. a first polyolefin film heat-laminated to a first surface of the foam sheet; and
- c. a second polyolefin film heat-laminated to a second surface of the foam sheet,
wherein at least one edge of the second film extends beyond a corresponding
edge of the foam sheet.

Claim 2 (Original): The composite material of Claim 1 wherein the foam sheet comprises polyethylene.

Claim 3 (Previously presented): The composite material of Claim 2 wherein the foam sheet is selected from the group consisting of a low density polyethylene, a medium density polyethylene, and a high density polyethylene.

Claim 4 (Original): The composite material of Claim 1 wherein the foam sheet has a density of between about 1 and about 8 pounds/ft³.

Claim 5 (Original): The composite material of Claim 1 wherein the foam sheet has a thickness of between about 0.001 and about 2 inches.

Claim 6 (Original): The composite material of Claim 1 wherein the first film has a thickness of not more than about 0.001 inches.

Claim 7 (Original): The composite material of Claim 6 wherein the first film has a thickness of between about 0.0003 inches and about 0.00075.

Claim 8 (Canceled)

Claim 9 (Previously presented): The composite material of Claim 1 wherein the first film comprises polyethylene.

Claim 10 (Original): The composite material of Claim 9 wherein the first film comprises a compound selected from the group consisting of low density polyethylene, metallocene based polyethylene, medium density polyethylene, high density polyethylene, and biaxially oriented polypropylene.

Claims 11-12 (Canceled)

Claim 13 (Original): The composite material of Claim 1 wherein the first film is stretch-oriented in at least two directions.

Claim 14 (Original): The composite material of Claim 1 wherein the first film has an orientation ratio of at least about 2 in both of said at least two directions.

Claim 15 (Original): The composite material of Claim 1 wherein the second film has a thickness between about 0.001 inches and about 0.008 inches.

Claim 16 (Original): The composite material of Claim 15 wherein the second film has a thickness of about 0.002 inches.

Claim 17 (Canceled)

Claim 18 (Previously presented): The composite material of Claim 1 wherein the second film comprises polyethylene.

Claim 19 (Original): The composite material of Claim 18 wherein the second film comprises a low density polyethylene.

Claims 20-21 (Canceled)

Claim 22 (Original): The composite material of Claim 1 further comprising an adhesive positioned along at least a portion of said at least one edge of the second film that extends beyond the corresponding edge of the foam sheet.

Claim 23 (Original): The composite material of Claim 22 further comprising a release liner applied to the adhesive layer.

Claim 24 (Original): A method for making a composite flooring material comprising the steps of:

- a. heat-laminating a first polyolefin film to a first surface of a polyolefin foam sheet; and

b. heat-laminating a second polyolefin film to a second surface of the foam sheet such that at least one edge of the film extends beyond a corresponding edge of the foam sheet.

Claims 25-28 (Canceled)

Claim 29 (Previously presented): The composite of Claim 1 wherein the first and second films are stretch oriented in at least two directions.

Claim 30 (Previously presented): The composite material of claim 29 further comprising an adhesive positioned along at least a portion of said at least one edge of the second film that extends beyond the corresponding edge of the foam sheet.

Claim 31 (Previously presented): The composite material of claim 30 further comprising a release layer positioned over said adhesive.